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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/812,546

03/29/2004

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07/27/2007

EXAMINER

SITTA, GRANT

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/812,546

**Applicant(s)**

MIZUKOSHI ET AL.

**Examiner**

Grant D. Sitta

**Art Unit**

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-4, 7 and 8 is/are rejected.
- 7) ☐ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 3/29/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. In regards to claim 3, "the estimated panel current becomes maximum panel current coincides with the maximum panel current." (line 4 The Examiner is uncertain how the "maximum panel current" coincides with "the maximum panel current."

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe et al (6,952, 193) hereinafter Abe.

4. In regards to claim 1, Abe teaches an image display (fig. 12, col. 10, lines 29-32) on a display panel (fig. 12 "display panel") by controlling current (fig. 5a, If1, If2, Ifn, etc...) flowing in display elements (fig. 5a "electron emitting device") for each pixel based on image data (fig. 12, data from HD YPbPr, VGA,) comprising: display setting circuitry (fig. 12, Inverse gamma processor, correction data calculator), for setting a relationship between image data (fig. 12 R, G, B) and current values (fig. 5A If) for current flowing in display elements (fig. 5a "electron emitting device") in response to an input adjustment signal (fig. 12 gain G1) , to set contrast or brightness (abstract "saturation characteristics of phosphors and the display images with high quality thereby" and col. 6, lines 1-15, "because of currents flowing into the scanning wiring and the wiring resistance of the scanning wiring, so as to degrade the display image" fig. 3 Examiner makes note of the relationship between the image data and the current ) ; and estimation circuitry (col. 6, lines 10-15) for estimating panel , (col. 6, lines 10-15 "correction circuit is a circuit that estimates the degradation of the display image") current flowing (col. 6, lines 10-15, "voltage drop" Examiner notes voltage drops are measured by the current through a resistor) in all pixels (fig. 5a "electron emitting device") when carrying out display for the display panel (fig. 12 "display panel") based

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on the image data (col. 2, lines 61-65 and 36-41, fig. 12, data from HD YPbPr, VGA,);  
and

current control circuitry (fig. 26 and 27 and gain calculator) for controlling actual panel current (col. 29, line 50-55 "emitted charge amount") by correcting the set contrast or brightness ("col. 29. lines 50-55, "gamma correction") based on the panel current estimated (col. 6, lines 10-15 "correction circuit is a circuit that estimates the degradation of the display image") by the estimation circuitry (col. 6, lines 10-15).

5. In regards to claim 2, Abe teaches wherein, when the panel current estimated by the estimation means does not exceed a specified set value (fig. 12 limiter), correction of contrast or brightness by the current control circuitry is not effected. (fig. 26 and 27) Examiner notes the current control circuitry is before the limiter and thus the current control circuitry will not be affected.

6. In regards to claim 3, Abe teaches wherein, if the panel current estimated (col. 6, lines 10-15 "correction circuit is a circuit that estimates the degradation of the display image") by the estimation means (col. 6, lines 10-15) exceeds the specified set value (col.31-32, lines 45-25), the current control means corrects the contrast or brightness ("col. 29. lines 50-55, "gamma correction) so that actual panel current at the time the estimated panel current becomes maximum panel current coincides with the maximum

panel current (figs 8C, col. 14, lines 45-67).

7. In regards to claim 4, Abe teaches wherein the current control (fig. 26 and 27 and gain calculator) means stores (examiner notes since there is feedback there is storage) a coefficient (col. 22, lines 1-55 "G1") defining a relationship between the estimated panel current required in correction of contrast or brightness (col. 22, lines 1-55), and correction of contrast or brightness (fig. 26, "gamma correction table"), and corrects the contrast or brightness using the coefficient (fig. 26, "GAIN" and "gamma correction table").

***Allowable Subject Matter***

8. Claims 5 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

9. Applicant's arguments, see pages 5-6, filed 5/11/2007, with respect to the rejection(s) of claim(s) 1-4 under Suzuki et al (6,078,302) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon

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further consideration, a new ground(s) of rejection is made in view of Abe et al 6,952, 193.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Grant D. Sitta whose telephone number is 571-270-1542. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571-270-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Grant D. Sitta

July 19, 2007

  
AMARE MENGISTU  
SUPERVISORY PATENT EXAMINER